DATA MANAGEMENT PLAN

J.1. Types of data

Both numerical model output and experimental data will be generated in the course of this research. Numerical data will be generated as processed versions of output from *COMSOL* numerical simulation codes. Experimental data will be generated as post-processed image data acquired from the *LaVision* 3D-PIV system around living organisms producing siphon flows.

J.2. Data standards

Data from the numerical simulations will be post-processed in *COMSOL*, and from laboratory experiments will be post-processed in *Mathematica* and *MATLAB* to form matrix-based images. Although these data are stored in software-specific file formats they can be easily exported in a variety of standard formats that then can be imported into other software packages. Metadata about each of the data sets are stored in an associated text file; these metadata will give details about the specific conditions for each of the numerical or experimental runs.

J.3. Policies for access and sharing and provisions for appropriate protection & privacy

Data acquired as part of this proposal will be prepared for publication in a timely manner in academic journals in both the oceanographic community. After this point, data will be freely shared with other researchers. The experimental data, in particular, are resource-intensive to store, often requiring several terabytes of storage. This file size precludes many forms of electronic data sharing, but the data can be easily transferred to other researchers on standard hard drives. Upon request, we will coordinate with interested parties to facilitate transfer of such data.

J.4. Policies and provisions for re-use & re-distribution

No permission restrictions will be placed on the data for re-use or re-distribution other than attribution of the data to their original source. It is likely that the data sets will be useful to researchers in fluid mechanics as well as those in oceanography and benthic ecology.

J.5. Plans for archiving and preservation of access

Data from the numerical simulations and laboratory experiments will be archived on two sets of external hard drives, stored in separate locations. Data will be preserved for a minimum of three years beyond the end of the proposed project.